N.Z.V.R.S. Bulletin

NEW ZEALAND VINTAGE RADIO SOCIETY
Vol. 15 No.1. **May 1994**

Stamp courtesy of N.Z.Post.

CAN YOU SPOT WHAT IS UNUSUAL ABOUT THIS STAMP?
SEE PAGE 4.

NEW ZEALAND VINTAGE RADIO SOCIETY

A non-profit organization devoted to the preservation of early radio equipment and associated historical information.

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MEETINGS; Regular Auckland of the NZVRS are held on the third Monday of each month at 7.30pm.
VENUE; Meeting room of the Dominion Road Methodist Church (at the rear of the Church) 426 Dominion Road Mt Eden.
AUCTION SALES of vintage items are held quarterly in the months of March, June, September and December at that month's club meeting.

AUCKLAND MEETINGS CALENDAR
MAY Ian Walker, radio inspector.
JUNE Auction Sale.
JULY To be announced

WELLINGTON AREA MEETINGS
Monthly meeting are held at the Tireti Hall, Te Pene Ave. Titahi Bay at 1pm on the first Sunday of every month. For further details contact Neville Grubner at 2 Peckham Grove Linden Wellington Phone 2326806.
FOR SALE BY NZVRS; Three core brown cloth covered 230 volt cable and lapel badges, AK cathedral shape $5 posted, order from the Treasurer.

THE NZVRS BULLETIN is published quarterly in the months of February, May, August and November. Contributions from members are always welcome and should be sent to the Editor. Opinions expressed by writers are not necessarily those of the society.
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BACK NUMBERS OF THE NZVRS BULLETIN; Most issues are still available, though some of the earlier issues are now out of print. Price is $1 each for numbers up to volume 10 and $2 for issues from volume 10 onwards. Postage is extra. Cheques to be made out to NZVRS. Order from John Stokes at the above address.

NZVRS LIBRARY; Members are reminded that our NZVRS library contains a good selection of books plus magazines and newsletters of several overseas societies. A list of publications is available from our librarian: Clarry Schollum
34 Pentland Ave. Mt. Eden
Auckland. Phone 09-6307011.
WAIKATO AREA MEETINGS are held regularly, contact Eric Carter 3 Haines Tce. Te Kuiti
Phone 07-8788888.
CHRISTCHURCH AREA Next meeting 20 June 7.30pm.

LETTER FROM HAWAII

John Stokes' article on pioneer Morton Coutts was the source of many memories for me. One was of Morton's decision to dismantle his ham transmitting equipment and , being a fan of 1ZM Manurewa, as were most Aucklanders in the early thirties, he "loaned": Bill Rodgers a linear RF amplifier tuned to 1250KC to raise the output of 1ZM from 17 watts to about 60 watts.

I believe that this amplifier was still in use when the station was sold to the Auckland Star some four years later. While on the subject of 1ZM perhaps a few memories may interest your readers.

Bill Rodgers retired from the Coldstream Guards in England and moved with his wife Rose to Manurewa where he went into business as a radio dealer, selling mostly Silvertone radios. The Auckland Radio Traders Federation realised that trying to sell radios with only 1YA on the air intermittently from the Strand Arcade and later, the Scots Hall in Symonds Street, it was a good idea for as many members to set up their own transmitting facilities to provide a continuous radio service through the day from 7.30 am until 10 pm. Among the active members were Radio Limited through their distributors McCabes Radios, La Gloria Gramophones in Newton, Lewis R. Eady at 192 Queen Street, Johns Ltd in Chancery Street, Roy Keith with his 1ZQ, latterly assisted by Atwaters Piano Company on the fifth floor of their building in Queen Street, George Anchor from his radio store on Victoria Street in Hamilton and of course, Bill Rodgers' rig in a converted hen house at his home, "Reotawhiti" on Massey Road. Bill used his front living room as a studio. Two program notes of interest were the regular garden broadcast of the Onehunga Citizen's Band on Sunday morning. (The Philips Reiss type carbon mike was balanced on a windowsill). The other was Bill's radio introduction of pianist Charlie Kunz, otherwise unknown to listeners. Bill's son John, a teenager at the time, operated the two turntables with their double arm Audax pickups in such an expeditious manner, that continuous sessions of Kunz's playing of up to 30 minutes gave the impression that it was a studio presentation. Bill Rodgers did little to correct his listeners' glowing comments.

Aloha
Alan L. Roycroft.

MORE REPLICA RADIOS!

Enclosed is a mailing from The Franklin Mint, a Texas Corporation supplying all manner of "collectibles", such as paintings, ceramic works of art, models of old autos and now the inevitable, old vintage radios.

The coloured folder shows a 1935 Air King "Skyscraper", a 1937 FADA art deco farm set, a blue mirror Sparton model 557 mantel, a 1935 Emerson compact, a 1938 RCA Victor 9WX in a tortoise shell black cabinet and a 1936 Crosley ultra modern plastic receiver. All nice and

new with original knobs and cabinet decor.(Actual size in the folder would make the upright sets four and a half inches tall. Editor.)

Just think, you will no longer have to search for that missing back cover, recone a rattly speaker, fill in cabinet scratches or Bakelite scratches, all you do is pay for one new radio that will arrive every three months at US $33.00 per month. All these radios are showpieces.

But somehow, something is missing, maybe it's that feeling everyone has when, after hundreds of hours cleaning, repairing and haggling over needed hard to get parts, you finally screw on the knobs and stand back to enjoy your efforts. It finishes up being a part of you.

Aloha
Alan Roycroft.

NZVRS VIDEO TAPES

TAPES AVAILABLE NOVEMBER 1993.

1. John Stokes Pioneer Radio Museum. 73 minutes

2. George Weston. About Valves. 160 minutes.

3. Club Meetings. Oct 91. Knobs. Feb 92 Speakers. April 92 Instruments. July 92 Continental Sets. 167 minutes.

4. Club Meetings. August 92. October 92. November 92. 183 minutes.

5. 1990 Conference. Edited version. 122 minutes.

6. Picnic 93. Bob Cook's place. February 93 April 93.

7. Club Meeting. May 93. Graeme's Shop. Ballarat.

8. 93 Exhibition 61 minutes and TVNZ tape of the same 19 minutes, total 80 minutes.

Copies of all video tapes available at $15 each plus postage from; D.H. McDonald. 1 Riversdale Road Avondale Auckland 7. Phone/ Fax 09-8286693.

CHRISTCHURCH GROUP

On Monday March 28th a meeting was called of Christchurch members of the NZVRS. Eight members attended, and four gave apologies. It was agreed to form a Christchurch group which would meet at three month intervals. The next meeting will be on Monday 20th June at 7.30 pm. Anyone interested contact Russell McKee at phone 3525778.

THE NEW 1950's ONE DOLLAR STAMP

Peter Lankshear in a letter to the Bulletin writes"Have you noticed that the $1 stamp in the new 1950's issue with a picture of Aunt Daisy and a Bell Colt on it, has the Colt reversed."That is the speaker and the dial are in the opposite positions to any Colt in our collections.

THE MAJESTIC MODEL 20

JOHN W. STOKES

GENERAL

In mid-1931 the model 20 was one of Grigsby-Grunow's first superhets; it was also one of the first to use a smaller chassis packed with older large size components, and thereby hangs a tale... From a servicing point of view its construction is a horrible example of what happens when this procedure is adopted. Although its performance is up to scratch, the 20 earned for itself the reputation of being one of the most difficult sets to work on that was ever produced.

Those lucky individuals who have never encountered a model 20 will probably be blissfully unaware that any American set could be as bad as, or even worse than, some Philips sets, but experience could make them change their minds. So, just what was it that made the 20 so difficult to work on? Because the chassis proper was not large enough to accommodate all the components the 'overflow' consisting of the filter block, the filter choke, input and output transformers were potted in pitch-filled cans bolted to the bottom cover plate, thus completely preventing access to underside of the chassis in the normal manner. In addition, the two IF transformers were also pitch filled and each contained a .1uF bypass condenser sealed inside. As it happened, these condensers frequently failed quite early in the life of the sets resulting in what would have been a simple replacement in an ordinary set becoming a major operation in this case.

CIRCUITRY

The 20 was an 8-valve superhet using the then new type 51 vari-mu tubes in the RF, mixer and IF positions with a 27 separate oscillator. Volume control was by means of a rheostat in the cathodes of all three tubes, but why the mixer was included is open to question. A second 27 triode was used as a high-level detector with 255 volts on its plate feeding into push-pull 45s via a high ratio stepup transformer. Audio gain was by no means excessive and it required a large IF signal on the detector grid to ensure that the 45s were fully driven.

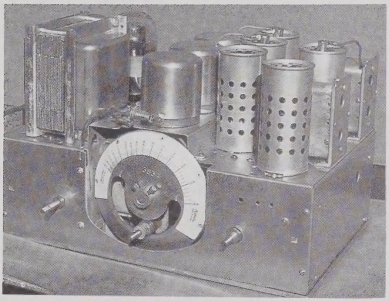
CABINETS

Three different cabinet styles were available, a table model plus two consoles. Illustrated here, the '21' table model was most frequently encountered in N.Z. where it was advertised in May 1931 at twentynine pounds ten shillings. The consolette model 22 is unusually small, particularly for a Majestic, though well proportioned and attractive; a 12" speaker was used.

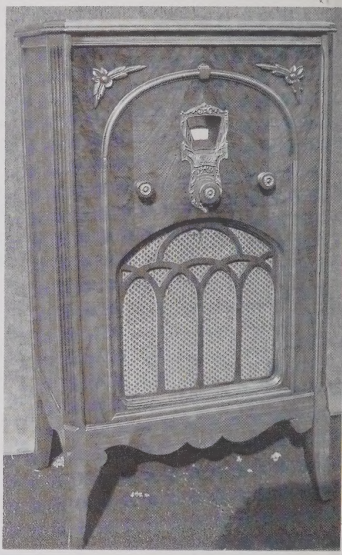
HISTORY

The 22 illustrated here was a 110 volt model and had been fitted with a 230/110-V stepdown transformer at the factory, an unusual procedure for Grigsby-Grunow who were one of the first American manufacturers to supply export models equipped with 230-V power transformers. Incidentally, the N.Z. Wiring Regulations did not permit a switch to be included in the

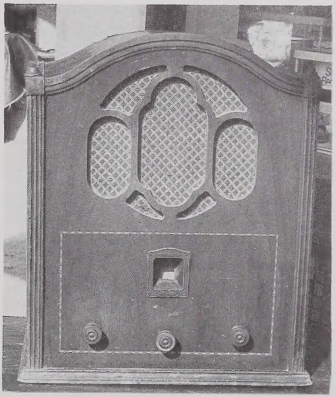
primary of a set's transformer when it was supplied from a stepdown transformer, yet how seldom was this regulation observed! Full marks to Spedding Ltd in this case as although there was a switch attached to the volume control it had never been connected up at the factory, obviously to comply with a request from the importers. How about that?

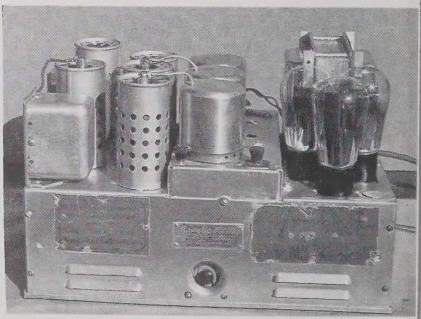


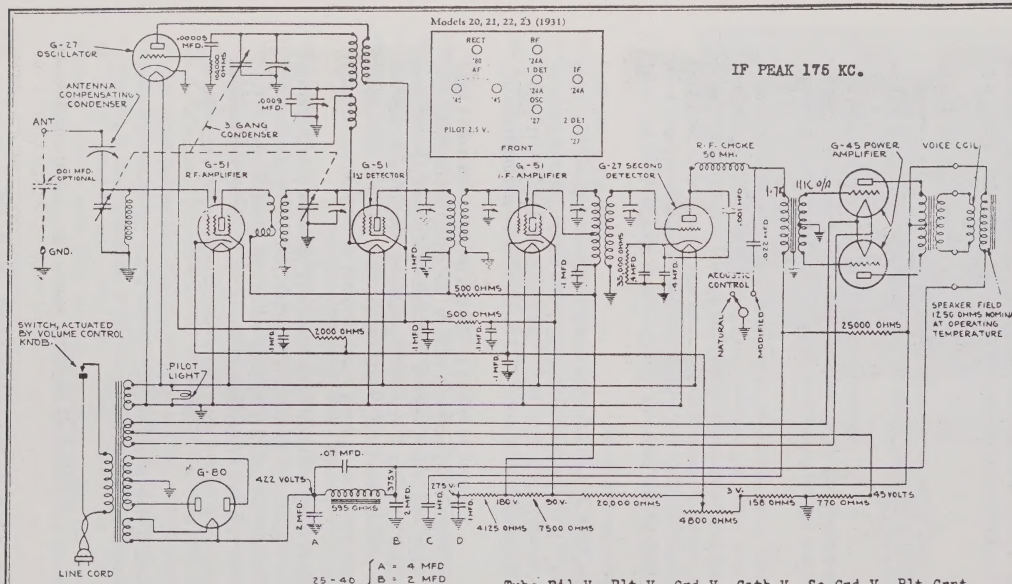
The model 20 chassis in front view is shown above and the model 21 table cabinet below.



Handsome little consolette model 22 above and a rear view of the model 20 chassis below







CONDENSER COLOR CODE

2 mfd condenser- Orange, stranded
2 mfd condenser- Blue, stranded
1 mfd condenser- Red, stranded
1 mfd condenser- Green stranded
Condenser common- Black stranded
.07 mfd condenser- White stranded

Tube	Fil.V.	Plt.V.	Grd.V.	Cath.V.	Sc.Grd.V.	Plt.Crnt
1RF	2.32	180.		3.	90.	5. ma
Osc.	2.32	90.		0.		4.
1Det.	2.32	180.		8.	90.	1.
1IF	2.32	180.		3.	90.	5.
2Det	2.32	255.		21		8.
PPAF	2.36	275.	45.			28.
PPAF	2.36	275.	45.			28.
Rec.	4.88	410.				80.

ZC178. WHERE DOES IT FIT IN?

By D.K.Collett

The answer to this question is that the ZC178 has no connection with any other equipment bearing the prefix ZC, but it was designed and built by N.Z. radio engineers working in the U.K. during the war period of 1944 to 1946.

In June 1944 twelve technical specialists were sent by the N.Z. Government to the U.K. in response to a request by the British Government to help fill a shortage of technical people in the U.K. These twelve were drawn from the N.Z. radio manufacturing industry, the N.Z. Post and Telegraph Department, the N.Z. Department of Scientific and Industrial Research and Army technical personnel. The leader of the group was Ralph Slade, from Philips Electrical.

However, by the time the group arrived in the U.K. their need for technical people had largely disappeared, and as a result all but five of the group returned to N.Z. The remaining five members were already committed to projects in the U.K., and remained there to complete their work. Of these five members one was Ian Walker from DSIR, who became involved with radar development at Malvern. Another was John Gifford, from Radio Corp. Wellington, who filled a job with the British Ministry of Supply in London.

The remaining three members were Noel Curtis from Dominion Radio and two Army officers, Captain D.K.Collett, seconded from 2NZEF Italy to 2NZEF U.K. and Lieutenant D.P.Joseph, seconded from N.Z. Army signals Wellington to 2NZEF U.K.. Towards the end of 1944 these three were joined by another technical man from 2NZEF Italy and seconded to 2NZEF U.K., Lieutenant P.Armitage.

These last group of three remained to fill an urgent request from N.Z. D.S.I.R. This was for some portable equipment, operating in the V.H.F. bands for propagation testing in the jungle conditions of the Pacific war zone. Communications generally were poor, but little ground work had been done to provide any reliable information about the best frequencies to use, or ranges to be expected in this difficult terrain. The urgent need arose for suitable gear to evaluate the problems, and to provide some answers for future planning.

The small team accepted the challenge, and carried out the development and construction of suitable V.H.F. equipment, working at the Radio Pre Production unit at Woolwich South London, where excellent facilities were available.

The project was named Z.C.178, the ZC, the ZC because of its New Zealand origin, and the number 178 came out of the hat, being chosen as one which could not have already been taken up by anybody else!

So the work started. the design work was done by Dave Joseph and Kem Collett, and approved by Dr. Coop, who was the N.Z. Government scientist in the U.K. Noel Curtis acted as liaison and procurement officer, and later, Phil. Armitage compiled the parts lists, operating manuals

and arranged the packing cases. All the odd jobs that technical people hate to have to have to do!

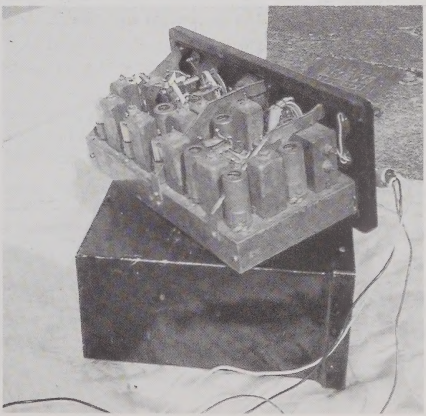
The design was for equipment which for would operate on three crystal controlled frequencies, Low 45mHz, Med 115mHz and High 235mHz with two spot frequencies on each. Operating modes were C.W., A.M. and narrow band F.M. Transmitter radiated power was approximately one watt. Each complete station consisted of three units, a receiver, a transmitter and a battery box each in similar tropic proofed cases and each mounted on back pack carriers called Everest carriers. Each station was complete with half wave aerials and coax. fed aerial matching units, headphones, Morse keys and spares.

All this was a lot of work for three to four people. New techniques were being developed at that time, involving moisture proofing, high temperature protection, corrosion prevention etc., and much of our design work had to make allowance for all these new tropical generated effects. All the units had to meet the total immersion tests , floatation tests and the battery box had to have enough buoyancy to still float when loaded with batteries.

After six complete stations had been completed, field trials were held at the British National Physical Laboratories, at Teddington, near London. These trails gave true figures for transmitter radiated power and receiver performance, which included the efficiency of the aerial systems. The equipment performed well and won a special commendation for concept and performance.

The six stations were then packed in special cases and dispatched to D.S.I.R. Wellington and that was the last the ZC 178 team ever heard of their offspring, which was two years in the making! Unless this gear has been destroyed, somewhere there should exist, six transmitters, six receivers , six battery boxes and all the aerial gear plus the carrying cradles and other accessories. I wonder where it has all got to?

This ZC178 history has been compiled by D.K.Collett. Most of the story will be reasonably correct, but he passage of 50 years could have clouded some of the details.



The ZC178 receiver chassis sitting on its case, see last Bulletin for the frontal view.

A SHORT HISTORY OF THE TYPE 45 POWER TUBE

by Alan S. Douglas

There are audio buffs who swear that the 45 is one of the best tubes ever made. But when it first appeared in 1929, it was a compromise. Electrodynamic speakers had just been popularised by Majestic, and radio manufacturers scrambled to include them in their 1929 models. Tubes available for driving them, however were only three: the 71A, the 50 and the 10. The 71A, which most makers used, was an old battery tube with limited heater emission and not quite up powering a dynamic speaker in the average living room. The next step up was the 50, which was too powerful and required a high plate voltage that in turn needed a more expensive rectifier and filter system (a pair of half wave 81s that were fully as large and power hungry as the 50s). The 10 had too high a plate resistance, and the same supply problems as the 50.

Evidently a new tube was needed, with the characteristics of the 71A but having a larger heater with more available emission, and able to run on a higher plate voltage (problems with insulation in the glass stem may have prevented the 71A from being rated at more than 180V). The increasingly popular 80 full-wave rectifier could supply 250V, filter components were not too expensive at this voltage, and the audio output was just enough more to satisfy most home listeners. That's how RCA came up with the 45 specs.

RCA at that time had just licensed the rest of the industry (or rather, selected manufacturers) to use its radio patents, and had total control of new tube types. Only Sparton made its own tubes, while a few minor makers used non-standard types. Evidently RCA sprang this new 45 on its licensees at rather short notice, in early 1929. Take the Eveready line as an example: the 32 series models, introduced in June 1929, used 71As and presumably were expected to be the standard for the rest of the year. But in August, long before the Fall selling season had started, the 42 series appeared which differed only in using 45 tubes. To make matters even worse for poor Eveready, yet another 52 series was also necessary to incorporate RCA's new screen-grid RF tubes, also announced in 1929. At that point National Carbon cried uncle and quit the set-making business, instead joining Raytheon in tube manufacturing!

Upper photo opposite page:Three independent brands: the Arcturus with blue glass, the Perryman with a mesh plate and lava insulators, and a pre-Eveready model 45 from Raytheon with the name embossed on the plate.

Lower photo opposite page:RCA and Cunningham tubes were made on the same production line. Note the rather old fashioned internal construction, using a glass arbor rather than a mica spacer. Base markings have been whitened with chalk for the photo.

PERRYMAN
RADIO TUBE
P. A. 245
POWER AMPLIFIER
FIL. V. 2.5
FIL. A. 1.5
PLATE V.
250 MAX.
PERRYMAN ELECTRIC COMPANY
Raytheon
RAYTHEON
RAX
245
Raytheon
RAX - 245
POWER
ARCTURUS
No. 135
MADE IN U.S.A.

Cunningham
RADIO TUBES
Standard
Since 1915
TYPE
CX-345
POWER
AMPLIFIER
FIL. VOLTS 2.5
FIL. AMP'S. 1.5
PLATE VOLTS 250
(MAXIMUM)
CUNNINGHAM
CX345
UX-245
RCA
UX-245
POWER
AMPLIFIER
RADIOTRON
UX 245

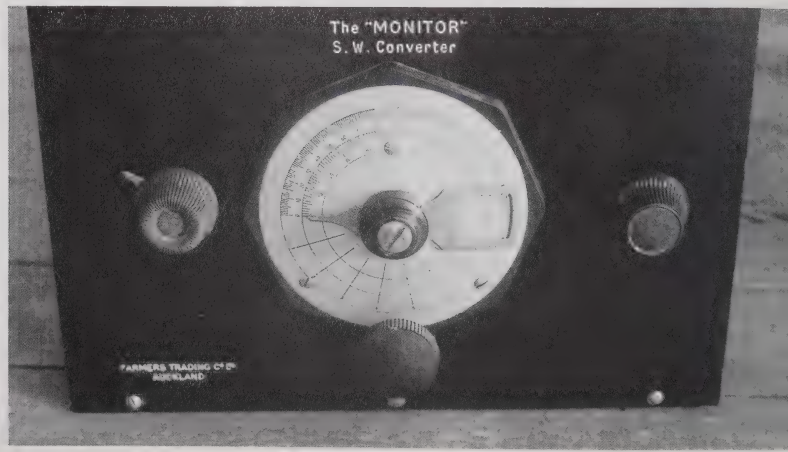
A NEW ZEALAND MADE SHORTWAVE ADAPTOR

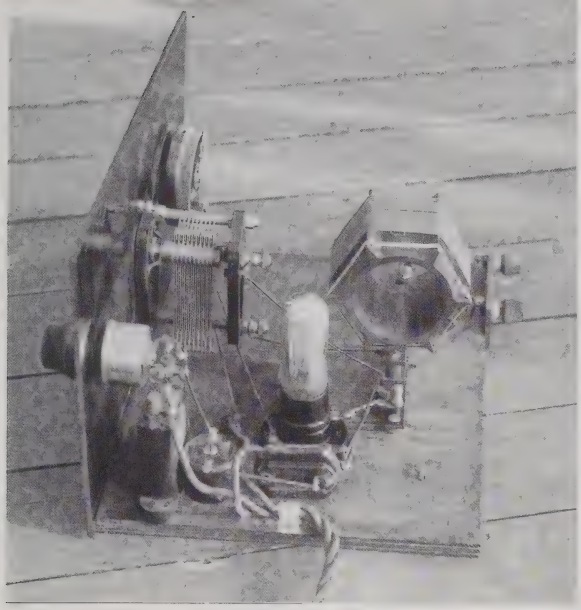
By Neville Grubner

One aspect of the vintage radio hobby which I find takes many hours and can be most rewarding is researching the history of sets. I generally try to find out who had the local agency and perhaps some insight into the relative success or failure of that particular model along with locating a circuit and any service data.

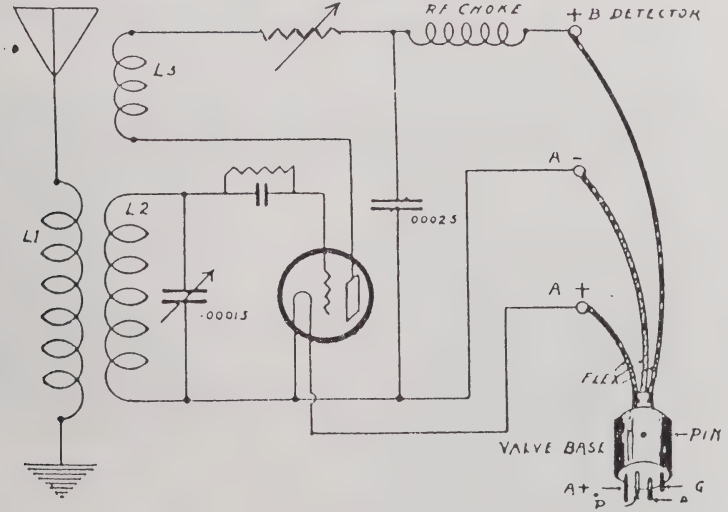
Every now and then though I discover something that I simply draw a blank on and can find no detail about at all. One such item I have is a shortwave adaptor that I had found tucked away on the shelf of a local boat shed about a year ago. This adaptor is marked "The Monitor S.W. Convertor" and the front panel is engraved "Farmers Trading Co. Limited, Auckland". The lid also contains a small Farmers Trading Co. brass badge. There is no doubt about who sold the device but who made it is a total mystery. Looking at the components used would suspect it was made around 1929 or 1930 and was obviously a special for "The Farmers Trading Co.". This unit while called a convertor is more correctly an adaptor. The circuit is a simple regenerative detector with a set of plug in coils for to cover the shortwave bands, the device of course designed to plug into the detector socket of your battery receiver. That is you removed the detector valve, plugged your shortwave adaptor into its socket, the adaptor was then powered from the set and used the set's audio stages.

This adaptor is like the early "Collier and Beale" made "Courtenay" that Ray Knowles mentioned in his August 1989 Bulletin article and must be one of the very early ones made here and sold commercially. Does anyone else know of one of these or can anyone remember seeing another? The circuit is taken from a 1929 radio constructors publication and is identical to "The Monitor".





A view of the monitor chassis and below is the circuit diagram.



RADIO LOOKALIKES

By Dave McLaren

During the development of commercial radio sets, first in the twenties and then on into the thirties it was inevitable that a certain similarity developed between models. The battery era produced a series of three dialers that all looked much the same and this trend continued with the start of the AC era.

Many collectors can point to radios that have marked similarities, and the two models in the photograph exhibit such similarities.

The radio on the left is the magnificent G.M. (called the Little General by some) with its copper IF cans and elegant shape. It has eight valves and performs well.

The radio on the right is an el cheapo from Montgomery Ward Company of America, an Airline, which has the basic five valves and a minimum of frills.

True the G.M. has a peephole dial and the Airline an arc dial, but the side columns match and that cut out - they are remarkably alike. Dimensionally they are different with the G.M. being taller and wider but shallower than the Airline.

However the story doesn't stop there. On page 113 of "More Golden Age of Radio" appear a group of four cathedrals made by the Well-Mayde Company of New Zealand, the grille cut-outs of these locally produced machines bear a startling resemblance to radios in the accompanying illustration, and since they were all produced around 1931 the famous chicken and egg question once more rears its head.

Another attractive radio that has a look-a-like also features in the Golden Age books but in the first volume. On page 28 is the stylish Bush cathedral from Great Britain but it would have to be a copy of an almost identical cabinet style popularised by the Echophone Company of the U.S.A.

The Echophone S5 is in a cabinet which is the model for the Bush and, like the G.M./Airline twins, only the dials are different.

It could be said that radio styles all bear a resemblance to each other, and that especially applies to cathedrals, but did these companies have to take their adoration of each other to these lengths?

The GM on the left and the Airline on the right.

A MODERN GLOBE RADIO

This picture of a six transistor radio was sent in byOwen Nairn of Hawera and shows what can be described as a modern version of the 1933 Colonial"New World" radio (see NZVRS Bulletin Nov. 1982). However, Owen says it reminds him more of the Japanese "Stand Radio" illustrated on the front cover of the May 1987 issue.

THE INVISIBLE COMPONENT

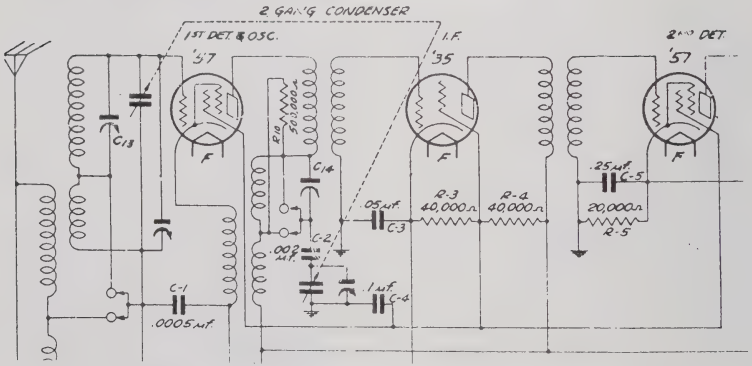
by John W. Stokes

Anyone unfamiliar with the actual chassis of a Gulbransen 352 (Wells Gardner 052) but who has come across its circuit diagram in Rider's might be pardoned for thinking that there is an error in the drawing, or, rather four of them! Take a look at the portion of the schematic reproduced below. Do you notice anything apparently amiss? That's right, there are no tuning capacitors across the windings of the IF transformers. Surely not an accidental omission on the part of the draughtsman? No it wasn't.

Recently, whilst working on one of these sets, I was reminded of the time when I first came across one and was puzzled by the omission of any adjusting screws on the IF transformers. What gives? Perhaps there were some small capacitors connected across the coil windings which were not shown on the diagram? Not so. Well, how were the IFTs aligned? The answer is that they were constructed in such a way that they had enough self-capacitance to resonate at the required frequency, in this case 175 kHz. Provided that the windings were constructed with sufficient accuracy they could be placed directly into a receiver without the need for any subsequent adjustments being required. Any stray capacitances in the receiver's wiring were insufficient to cause appreciable misalignment, bearing in mind the low IF involved.

So, the invisible component was the 'C' of the self-capacitance of the windings.

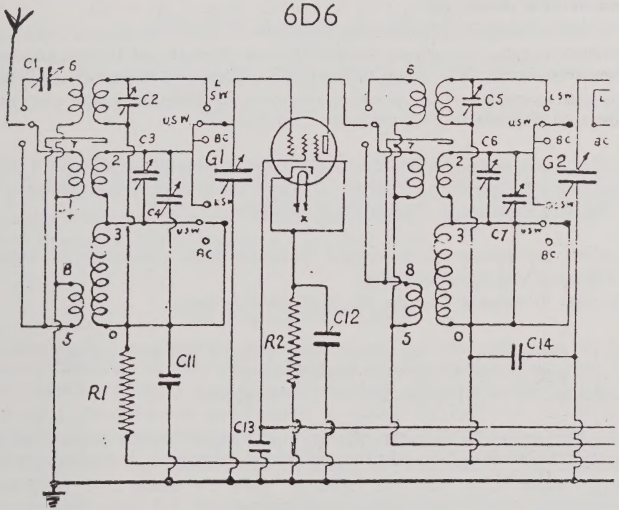
From personal experience I would say that these particular models just as well as others which had conventionally tuned IFTs, but as the idea of saving the cost of four separate adjustable capacitors must have appealed to any cost conscious manufacturer, why was it was not more widely adopted? Frankly I don't know the reason; does anyone?



Relevant portion of Gulbransen model 352 schematic. (1932)

The Gulbransen 352 series were not the only receivers to make use of self-tuned IF transformers but were the only ones to my knowledge which had all four windings so constructed. Other makes and models, such as the Majestic 460 and Gilfillan 5T, for example, had only the secondary of the second IF fixed tuned; again the IF peak was 175 kHz.

Coming now to something even more elusive in the way of an invisible component, a Collier & Beale set of 1936 vintage incorporated an idea which, had it not been specifically mentioned in the manufacturer's service manual, would have been undetectable from an examination of either the circuit diagram or the wiring of the receiver. In this case the idea was to deliberately introduce some regeneration into the RF stage to boost the set's performance on the shortwave bands by positioning the earthing points on the chassis for the AVC bypass capacitors, shown as C11 and C14 on the diagram. At the higher SW frequencies enough inductance was present between the earth points of the two capacitors to achieve the desired results. Tricky! In this case 'L' was the invisible component. How about that?



Relevant portion of C & B model 6AW schematic (1935).

WANTED

Five inch speaker with 55mm. magnet for Clipper 5M4 (see p.38 Golden Age).
Bill Lambie. 12 Foster Street Avalon Lower Hutt. Ph. 5678840.

Chassis to suit Jackson Bell 25 Peter Pan, 5 valve superhet, any condition, will pay good price. One large cathedral radio in any order will pay up to $500.
Please reply to; Mark Mimus P.O. box 77 Thames North Island New Zealand.

Valves: ECC81, ECC82, ECC83, ECC88, 12AT7, 12AU7, 12AX7, 12BH7, 6DJ8. Mullard M8162, M8136, M8137. RCA/ GE 5751, 6201, 6189, 6197, 6350, 6922, 7025. Power tubes 807, KT66, KT77, KT88, 6550A, 300B, 211/VT4C, 805, 838, 845. Old and hard to find valves etc. RCA or similar valve handbooks.
Ross Chatwin. 94 Vale Rd. St. Heliers Auckland 5. Ph. 5753355.

Knobs for National HRO, which are black bakelite with a metal disc labelled selectivity and audio gain. Coil box 1.4 to 2.5 Mhz for NZ made C&B HRO type plus any other coil boxes. Lamphouse 1936 and 1937 Annuals.
Phil McGechie 64 Marellen Drive Red Beach. Ph. 09-4266661.

Power lead socket for Philips 361A. Radiolette badge. Dial scale for Pacemaker Leader, see back cover of More Golden Age.
Bill Meiklejohn. 56 Kokich Cres. Onerahi. Whangarei. 09-4361922.

Items for Army 48 set. 1000 kHz crystal, antenna rods, headphones, mike, key and spare tubes.
Denny Burrage. 11 Bannister Place Auckland 7. Ph. 6279780.

Crosley 122, 7 valve superhet chassis for a Super Buddy Boy cabinet. Crosley 8 valve TRF with two 71A's in the output for a Showbox. Will pay cash or swap other old chassis.
Murray Hall. 802 Rolleston St. Thames. Ph. 07-8688804.

Zenith shutter dial cabinet and escutcheon. Halderson audio transformer, no objection to having it rewound. Can buy or exchange.
Dave McLaren. 25 Aotea St. Dunedin. Ph. 03-4550693 (collect).

Marconi 365 morse key. CW and vintage radio enthusiast will keep it giving good service. Happy to pay generous price, swap other keys, or whatever.
Barry Kirkwood. Ph. 09-3766687 or fax 09-3737450 anytime.

Knobs for STC 84 and 54 consoles 1932 era (p.70 MGA). Circuit diagram for STC 84. Wooden cabinet for Ultimate Ekco REF (see p.132 More Golden Age "Canewdon"). KL3 "P" base battery output valve. LOPT for Thorn 12" B&W TV model 1201, transformer part number T602/TRNF2080 or set or chassis to rob one from.
Des Smith 156 Rangitoto Rd. Papatoetoe. Ph. 09-2783451.

Lid stay for early Atwater Kent such as model 20C.
Peter Lankshear. 292 Racecourse Road Invercargill. Ph. 03-2175515.

Cabinet and dial scale for Radio Ltd RU same as Ultimate, Skyscraper, Golden Knight and Rolls. Harold Ault. c/o. Postal Services Kawhia. Ph 8710767 (toll call will be paid).

A 25B8 valve. Valve shields for Philco 71E and RCA R37. Cabinets for AWA Radiolettes, Radiolas and Atwater Kent P717X. Valves for Philips 2510. Four Philips Radioplayer stars and waves pattern knobs.
Bob Cook. Flat 3/475 Blockhouse Bay Rd. Blockhouse Bay Auckland. Ph. 09-6266241.

Cabinet or parts set for Radio Ltd CTU similar to CTS (see p.133 More Golden Age). Side contact valves CK1, CF3, CB2 and CL4 to get a 1937 Telefunken on the air again.
Ian Sangster. 75 Anawhata Road Piha RD.1 New Lynn. Ph. 09-8149597.

AVAILABLE

Genuine AWA Radiola bakelite escutcheon with dial cover and badge $45 plus post and packing. Genuine AWA Radiola badges $22.50 plus p. & p.
Bob Cook. Flat 3/475 Blockhouse Bay Rd. Blockhouse Bay Auckland. Ph.09-6266241.

A letter has been received advertising the following radio from a non member of the NZVRS. Scott Twelve Valve All Wave De Luxe in a cabinet with spare valves, original handbooks and other Scott literature. $1800. Included is a special transport box.
Bill Moffit. 253 Palmerston St. Westport. Ph.03-7897433. Photos of this set are with the Editor.

Valve cartons. Plain, good quality. Small (EL84) $10 per 100, GT (6V6) $10 per 100, medium (2A5) $12 per 100 and large (47) $18 per 100. All plus postage. Any quantity available, perhaps members could group together and order in bulk to get a cheaper postage rate.
Paul Burt 44 Hastings St. West Christchurch.2. Ph. 03-3327157.

QUESTIONNAIRE

At our Auckland meetings for many years the question has been raised from the floor "What is the Society doing about acquiring a building of our own?". As a result of this our Secretary has drawn up a comprehensive questionnaire to canvass the views of all our financial members, he has also analysed the average attendance figures for the past several years and has the figures available if you care to write to him, enclosing a stamped addressed envelope.

We, of the committee hope that you can find time to fill in this survey and post it back. The Treasurer has our financial statement available again on receipt of a stamped addressed envelope.

MARKETPLACE

Advertisements for the next issue must reach the Editor by the 18 July 1994. Ads should be either hand printed or typed on a separate page. Note: no verbal or phone ads will be accepted. Remember to include your name, address and phone number. There is no charge for ads but the NZVRS is not responsible for transactions between members. Address ads to;
Ian Sangster 75 Anawhata Road Piha R.D.1 New Lynn. 1232.

AVAILABLE

Hallicrafters TW1000 World Wide ac/dc. Rugby (see p110 More Golden Age). HMV 526D chassis. Cabinets for Columbus 34 and 42 in good order and various Columbus glass dials. Will sell or swap for Columbus radios especially model 24.
Fred Glasson 17 Rhodes Street Carterton. Ph. 06-3798780.

Atwater Kent 944 and 165 available in trade for Zenith or other Atwater Kent etc.
L.B.Hartley. 814 Rangiora Street Hastings. Ph.8763643.

Apex battery radio, needs attention, has all its valves $400. Sterling baby horn speaker $265. Kitset battery radio, nice mahogany cabinet, open to offers.
Please write to; Mark Dawson. 51 Flanders Avenue Onekawa Napier.

Majestic 70B power unit (Grigsby Grunow, Chicago) in good condition $70. One carton of unused Sylvania 42's $15.
Pat Robb 1275 Dominion Rd. Mt. Roskill. Ph. 09-6207347.

Bob Cook and I both owned Atwater Kent 165 cathedrals (see p.93 Golden Age or p.152 More Golden Age) with damaged grille fretwork. We have teamed up and had computer program written to laser cut replacements from 3mm. plywood. Extras were made and these are available for $45 each.
Ian Sangster or Bob Cook at 3/475 Blockhouse Bay Rd. Blockhouse Bay. Ph. 09-6266241 or 09-8149597.

Philco 1937 37-620E (see Golden Age p.112) offers. Two Bell white bakelite sets, one bc. and one s.w. and b.c. Westco Daventry seven valve five band set. All in good order.
J.Rawlings. Fiddlers Hill Puhoi North Auckland. Ph. 09-4220760.

Geloso G207 14 valve, 6 band (10, 11, 15, 20 ,40 and 80M amateur bands) receiver. Working, less headphones (low impedance). Complete with handbook. $100. Freight extra. Beautifully made.
Mike Edwards. 6 Melody Lane Otahuhu. Auckland 1106. Ph. 09-2767573.